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STUDIENREISE AUF DEN SUNDAINSELN UND IN NORDAUSTRALIEN
1930-1932.

On a collection of Acrididae
(Orthoptera) from Australia and some
Indo-malayan islands

by

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Eygelsheoven (Holland).

With 1 figure.

The small collection brought back by Prof. HANDSCHIN from his stay in the Lesser Sunda Islands and Northern Australia contains a series of interesting genera and species. It proves, that our knowledge about the *Acrididae* of these countries is still very incomplete and that every collection forms a welcome contribution to systematical and zoogeographical study. The new species from Australia are studied by Prof. SJÖSTEDT and described in the annexed article (p. 521).

I. Subfam. EUMASTACINAE.

Erucius apicalis Westwood.

Localities: Java: Goenoeng Pantjar. Aug. 1931. 1 ♂. Lake of Tjibombong. Dec. 1930. 2 ♂♂.

Erucius (Curicus) tenuis Br. v. Wattenwyl.

Localities: Java: Salak, 1000 m. Dec. 1930. 2 ♂♂, 3 ♀♀. Tjibodas-Gedeh. 1400-1600 m. Aug. 1931. 1 ♂, 1 ♀.

II. Subfam. ACRIDINAE.

Acrida turrita Linné.

Localities: Australia: Darwin. N. T. April 1931. 1 ♂. Burnside, May 1931. 1 ♂, 1 ♀.

Ailopus tamulus Fabricius.

Localities: Australia: Brock's Creek. 28 April 1932. 1 ♂. Soembava: Bima. Dec. 1931. 1 ♀. Lombok: Ampenan. Jan. 1932. Timor: Koepang. Dec. 1931. 3 ♂♂.

Two male specimens from Timor are very small, measuring only 14 mm and of a dark colour. Perhaps a new subspecies.

Phlaeoba rustica Stål.

Locality: Java: Pasir Sarongge. Aug. 1931. 1 ♀.

Moraba serricornis Walker.

Localities: Australia: Burnside N. T. April 1931. 1 ♂, 3 ♀♀. Kadarri. 2 ♂♂.

III. Subfam. OEDIPODINAE.

Heteropternis respondens Walker.

Locality: Java: Buitenzorg. June 1931. 1 ♀.

Heteropternis obscurella Blanchard.

Locality: Australia. Burnside N. T. April 1931. 1 ♂.

Pternoscirta caliginosa de Haan.

Locality: Java: Buitenzorg. Jan. 1931. 1 ♀.

Locusta migratoria L. phase *migratoria* L.

Localities: Australia: Burnside N. T. May 1931. 1 ♀. Java: Ranoe Kembolo, 2500 m., Febr. 1931, 1 ♂.

Trilophidia cristella Stål.

Locality: Java: Buitenzorg. Nov. 1930. 1 ♂.

Trilophidia annulata Thunberg.

Locality: Seombava: Soembava. Besar. Dec. 1931. 1 ♂.

Gastrimargus marmoratus Thunberg.

Localities: Seombava: Bima. Dec. 1931. 1 ♀. Soemba: Wain-gapoe. Jan. 1932. 1 ♀. Timor: Koepang. Dec. 1931. 1 ♀. Amrassi. Dec. 1931. 1 ♂.

Dittopternis handschini n. sp.

Size small or medium, body slender. Antennae filiform, slightly thickened towards the apex, reaching a little beyond the hind margin of pronotum in the male, shorter in the female. Head smooth, only the vertex with some rugosities; frontal ridge slightly reclinate, not quite separated from the fastigium, but sulcate near the fastigium though narrow. Margins slightly widened towards the clypeus, not or only slightly constricted near the ocellum. Its surface impressed and rugosely punctuated, distinct throughout, near the clypeus more strongly widened. Cheeks nearly smooth or with some rugosities.

Fastigium of vertex moderately sloping, forming with the frontal ridge a rounded angle, not distinctly separated from the frontal ridge by a distinct carina, somewhat longer than broad, pyriform, somewhat narrowed in front, margins forming raised keels, its surface and that of the vertex rugosely punctured, without median keel or with a blunt, low keel. Eyes globular, a little longer than broad, lying in or only a little above the level of the head, interocular distance little above the level of the head, twice as broad as the first antennal joint. Temporal foveolae small, triangular, visible from above.

Pronotum short, constricted anteriorly; anterior margins truncate, posterior margin obtusely angulate; median keel low, distinct, not elevated, only cut by the third sulcus; lateral keels angulately bent, incomplete, only indicated in the prozona and in the middle of the pronotum by a small row of tubercles. First transverse sulcus absent, second and third distinct, both on the disc and on the lobes, third sulcus before the middle, surface of the disc finely rugose.

Lateral lobes of pronotum deeper than long, finely punctured with a small, but not shining callosity near the middle of the anterior margin; lower margins broadly rounded behind, ascendant ante-

riorly; anterior angle acute and obtusely pointed, posterior margin slightly concave.

Sternum nearly smooth; mesosternal lobes small and transverse, separated by a broad interspace, distinctly broader than the lobes; inner margins widened posteriorly. Mesosternal interspace distinct, broader than long. Elytra and wings well developed, reaching far behind the apex of hind femora.

Elytra narrow, anterior and posterior margin nearly parallel, apex rounded; hyaline except the basal fourth and the anterior margin which are subcoriaceous. Mediastinal area reaching beyond the middle of elytra, with a small basal dilatation; scapular area reaching a little beyond the middle of elytra, narrow, with regular transverse veinlets, coriaceous basally; discoidal area narrow, with sparse transverse veinlets, with false vein in the middle, interulnar area as broad as discoidal area, with sparse veinlets and false vein; apical half of the elytra with regular perpendicular veinlets.

Wings hyalinous, the anterior margin especially in the apical half with a brown stripe, posterior margin very slightly infumated. Anterior and median legs normal. Hind femora short and rather thick, with the keels obtuse, Kneelobes rounded. Hind tibiae rounded, with 9 outer and 10 inner spines, without outer apical spine, the inner apical spurs are longer than the outer ones and inter se not of equal length. Hind tarsi short, third joint about as long as the two others together. Arolium short.

Male: Supraanalplate triangular, apex broadly rounded, with a median basal sulcus. Cerci as long as the supra anal plate, straight, cylindrical. Subgenitalplate short, obtuse.

Female: Supraanalplate triangular, apex rounded, with a small basal median impression. Cerci short, not reaching the middle of supraanalplate, triangular, apex obtuse. Valves of ovipositor short, margins smooth. Subgenitalplate much longer than broad, widened posteriorly, posterior margin truncate or somewhat rounded.

General coloration brown with yellowish brown and black markings. Antennae brown, more or less annulated with black, darker apically. Head yellowish brown, with a small black transverse band between the eyes just above the insertion of the antennae. Furthermore is there an indication of a brown lateral postocular fascia.

Pronotum with the disc brown; along the lateral keels with a black stripe, that is incomplete and bordered in the middle of the disc on the anterior side by a more whitish stripe. Lateral lobes of pronotum in the lower part yellow or yellowish brown, the upper one reddish brown, with a black stripe, bordering the yellow lower part.

Elytra with basal half and along the anterior margins blackish-brown, the other part hyalinous with the veins brown. Wings hyalinous, along the anterior margin blackish brown, posterior border slightly infumated. Anterior and median legs brown.

Hind femora brown, area externo-media with a black spot in the middle; from above with two velvety black spots; inner area with a black spot in the apical half; knees brown, inner face black. Hind tibiae yellowish-white (blue ?), the base black, with a small black stripe on the inner surface, a little above the middle; the apex more brown.

Hind tarsi yellowish-white. Sternum and abdomen yellowish-brown. Supraanalplate in the male black.

	♂	♀
Length of body	13 mm	17 mm
„ „ pronotum	2,5	3,5
„ „ elytra	15	17
„ „ hind femora	7	9

Localities: Timor: Koepang. Dec. 1931. 1 ♂ (Type, Museum Basel). Isle of Wetter. 2 ♀♀ (coll. mea)

I have the pleasure to dedicate this species to Prof. E. HANDSCHIN, the collector of this small, but interesting collection.

IV. Subfam. PYRGOMORPHINAE.

Atractomorpha psittacina de Haan.

Locality: Java: Buitenzorg. Nov. 1930. 1 ♀.

Atractomorpha crenulata Fabricius.

Localities: Java: Buitenzorg. Nov.-Dec. 1930. 2 ♀♀. Pasir Sarongge. 1 ♂, 1 larva.

Atractomorpha similis Bolivar.

Locality: Soembava: Bima. Dec. 1931. 1 ♂.

Atractomorpha crenaticeps Blanchard.

Locality: Australia: Marrakai, N. T. May 1931. 1 ♂.

V. Subfam. CATANTOPINAE.

Gesonia mundata Walker.

Locality: Java: Garoet. Feb. 1931. 1 ♂.

Caryanda spuria Stål.

Locality: Java: Depok. Nov. 1930. 1 ♂.

Valanga irregularis Walker.

Locality: Australia: Darwin, N. T. June 1931. 1 ♀.

Valanga nigricornis-melanocornis Serville.

Locality: Java: Buitenzorg. Jan. 1931. 1 ♂.

Patanga succincta Linné.

Locality: Soemba: Waingapoe. Jan. 1932. 1 ♀.

Austracris guttulosa Walker.

Locality: Soemba: Waingapoe. Jan. 1932. 1 ♂.

Austracris basalis Walker.

Localities: Australia: Marrakai, N. T. May 1931. 1 ♂. Kadarri, April 1931. 1 ♀.

Austracris proxima Walker.

Locality: Australia: Burnside, N. T. April 1931. 1 ♂.

Caledia propinqua Walker.

Locality: Australia: Marrakai, N. T. May 1931. 1 ♂.

Goniaea grootensis Sj. var. *basirosea* Sjöstedt.

Locality: Australia: Barrels Creek. April 1931. 2 ♂♂, 1 ♀.

Goniaca fuscobasalis Sjöstedt.

Locality: Australia: Broock's Greek, N. T. May 1932. 1 ♂.

Catantops angustifrons Walker.

Localities: Australia: Burnside N. T. June 1931. 1 ♀. Darwin. April 1931. 1 ♀. Soembava: Bima. Dec. 1931. 1 ♂. Flores: Ende-Todabeloe. Dec. 1931, 1 ♂.

Catantops vitripennis Sjöstedt.

Locality: Australia: Shoebridge Creek, N. T. April 1931. 1 ♂.

Catantops exinsula n. sp.

General coloration brown or blackish brown. Antennae short, not reaching beyond the margins of pronotum, composed of relatively short joints, the middle ones about twice as long as broad; apical joint slightly pointed; brown or yellowish, darker apically. Head brown or yellowish brown with irregular dark spots or points, sometimes more or less regular along the margins of the frontal ridge or lateral keels; vertex with a black or brown, small median stripe and blackish-brown lateral postocular fascia.

Pronotum brown; disc blackish brown or yellowish brown, with dark stripes or points or with an irregular undulated yellowish stripe on each side, sometimes unicolorous yellowish brown; lateral lobes yellowish brown, with blackish-brown lateral postocular fascia, sometimes absent; disc with the margins parallel in the prozona, distinctly widened in the metazona, principal sulcus about in the middle.

Elytra and wings relatively short, reaching only a little beyond the apex of hind femora. Elytra brown, the apical half tessellate with darker spots along the veinlets, anal area sometimes more yellowish brown.

Wings hyalinous, the principal veins black; short and relatively broad. Sides of the thorax brown; epimerum of metathorax with a distinct yellowish stripe, which stripe is running into the insertion and very base of the elytra.

Prosternal spine short, thick; apex blunt, slightly bent towards the mesosternum. Sternum and abdomen yellowish brown. Anterior legs yellowish or yellowish-brown, outer or lower area of femora

and tibia sometimes with a blackish-brown longitudinal stripe. Median legs yellowish or yellowish brown, femora with the inner area black. Hind femora short and thick, yellow or yellowish brown, area supra externa yellowish or yellowish-brown without dark spots, area externo-media blackish brown in the upper and yellowish in the lower half, the black party forming a longitudinal stripe sharply indicated; outer, lower area brown or with a brownish stripe, inner lower area reddish brown or brown, both without dark spots, inner area reddish brown or red, the upper half black, area supra interna yellowish brown or brown with one or two dark spots; knee brown or blackish brown.

Hind tibiae red, at the base more yellowish; spines yellowish, with black tips. Hind tarsi yellowish red.

Male: Supra-analplate relatively long; margins parallel, near the apex attenuated, apex projected, in the middle rounded; in the basal half with a narrow median sulcus.

Cerci as long as the supra-analplate, incurved, slender; apex more or less pointed. Subgenitalplate relatively long, pointed, slightly curved upwards. Last sternit with a triangular, sharply pointed projection in the middle and a longitudinal median, black sulcus.



FIG. 1.
Catantops exinsula nov. sp.
Hind femora.

	♂	♀
Length of body	27,5-29 mm	34-39 mm
„ „ pronotum	5,5-6	7-8
„ „ elytra	25-26	31-35
„ „ hind femora	14-15	18-20

Localities: Flores: Ende. May 1930. 3 ♂♂, 1 ♀ (Type) leg. W. C. v. HEURN. (coll. mea). Wetter. 1 ♂, 1 ♀. Amboina. 1 ♂ (coll. mea). Soembawa: Bima: Dec. 1931. 1 ♂ (coll. HANDSCHIN).

From the above mentioned forms only the *Eumastacinae* and,

amongst the *Acridinae*, *Moraba*, show some peculiarities concerning their behaviour.

The *Eumastacinae* belong to the typical fauna of the virgin bush. They are only to be found at the edge of the high forest or close to it and never enter the open country or the plantations. They sit on the leaves of bushes and trees and prefer the proximity of water or very damp places.

Moraba is a peculiar wingless Australian genus. It is to be found everywhere in the virgin bush of Northern Australia and seems to be confined to young Eucalypt shrubs, on which it sits closely attached to the stems and branches in the manner of stick-insects, to which their form bear some resemblance. Their movements are very slow and very seldom they jump; their hindlegs are not much stronger than the middle and anterior pair, and only fit for climbing. So the form seems to be adapted completely to live on trees, where it needs not to jump for shelter as soil forms are doing; their shape and color being sufficient to protect the form from sight.

All other forms belong to the open country, the plantations and the grasslands. There they are to be found especially numerous after the harvest and in Northern Australia during the bush-fires, from which they are flying in great masses, prosecuted by the birds whose easy prey they are.

APPENDIX.

New Acrididae from North-Australia

by

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1. *Moraba longirostris* n. sp.

Thorax laevis; carinis mediana excepta nullis. Fastigium de margine anteriore oculorum quam oculi distincte longius; antennae 19-articulatae, quam caput distincte longiores, caput supra a latere visum rectum; cerci tuberculiformes, hirsuti.